

A NEW SPECIES OF *DICHOMERIS* FROM COSTA RICA  
(LEPIDOPTERA: GELECHIIDAE)

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*Abstract.*—*Dichomeris santarosensis*, new species, is described from Costa Rica. The larvae are serious defoliators of *Quercus oleoides*.

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D. H. Janzen (Department of Biology, University of Pennsylvania, Philadelphia) is attempting to rear all lepidopteran species from Santa Rosa National Park, Costa Rica, in preparation for long-term ecological investigations on insects and plants in the park. Among the many species reared by him is an undescribed *Dichomeris* whose larvae completely defoliate *Quercus oleoides* Schlechtendahl and Chamisso (Fagaceae) when the new leaves are unfolding. He has worked out the life history and plans to publish it separately. A formal description is presented here to enable use of the scientific name.

*Dichomeris santarosensis* Hodges, NEW SPECIES

Figs. 1-4

A small yellowish-brown moth with prominent labial palpi (Fig. 1).

Description.—Upper surface as figured. Maxillary palpus and base of haustellum dark brown, individual scale bases pale yellow, rest of haustellum pale yellow; outer surface of first and second segments of labial palpus dark brown, individual scales pale yellow orange, second segment with strong dorsal and anteroventral scale tufts, scales of distal margin of tuft tipped with pale gray, inner surface of first and second segments nearly uniformly yellowish gray, most scales of anteroventral tuft tipped with gray brown, anterodorsal surface of second segment uniformly pale yellowish orange, third segment mottled dark orange and dark brown; antenna with dorsal surface of scape dark brown, shaft with individual scales tipped with dark brown, yellowish orange basally, ventral surface uniformly pale yellowish orange, sensory areas restricted to small area on alternate half segments of anteroventral surface; frons shining yellowish gray medially, with yellow or purple reflections, scales in front of eye dark brown; vertex and occiput pale orange or yellowish orange above eye, gray or gray brown medially, all scales tipped with pale margins and with shining yellow and purple reflections; a row of dark-brown scales behind eye; ocellus present. Tegula dark brown on anterior surface, orange brown dorsally. Dorsal surface of mesothorax mottled orange brown and gray brown. Foreleg mainly brown, individual scale bases yellowish gray or yellowish, epiphysis with pale yellowish-gray scales at apex; tibia and tarsus darker gray

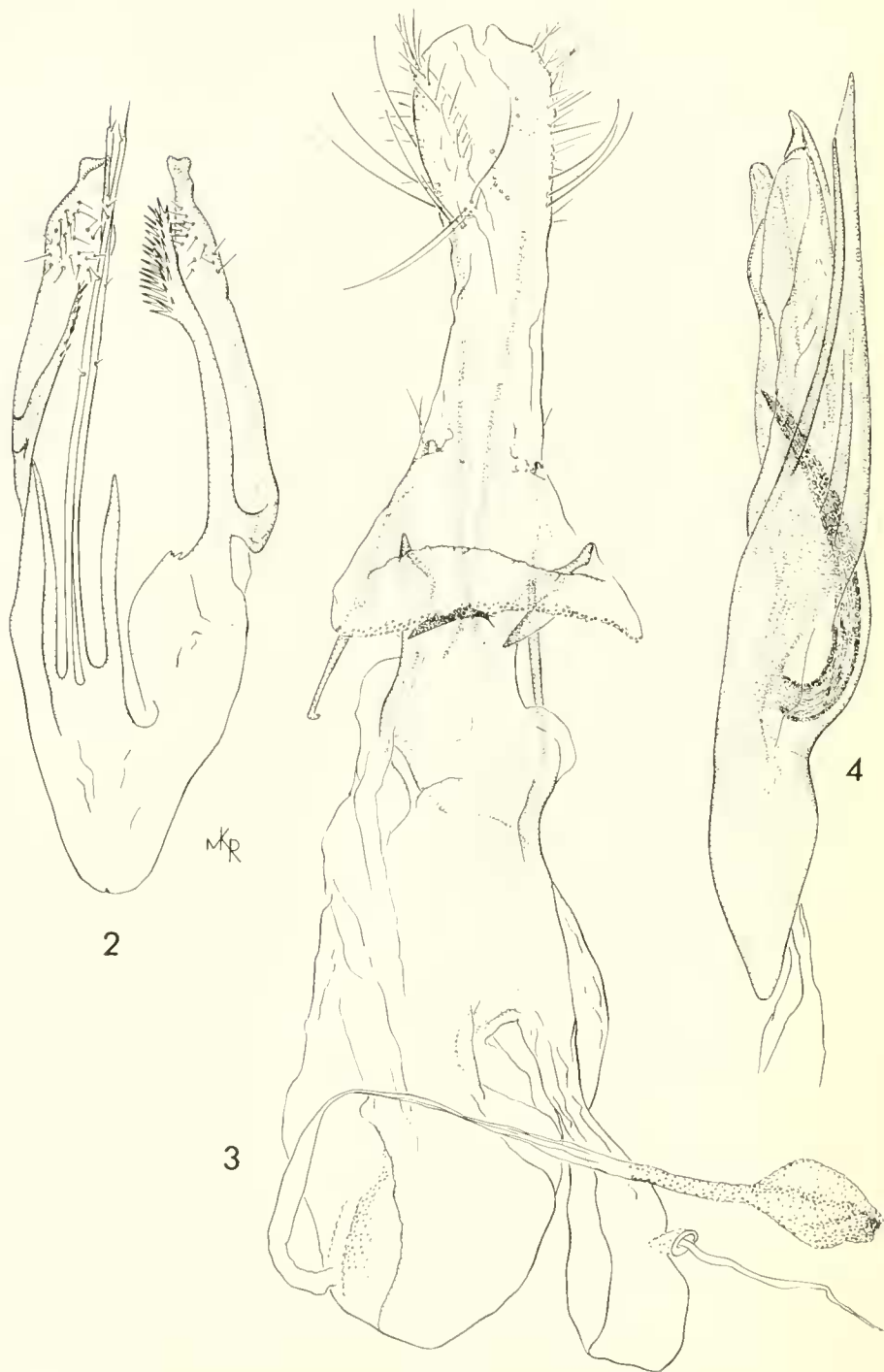


Fig. 1. *Dichomeris santarosensis*, new species, holotype male.

brown, scales at apexes of tarsal segments pale yellowish white to white. Midleg much as for foreleg, ventral surface of tarsus uniformly pale, shining yellow. Hindleg: coxa shining pale yellow with yellow and lavender reflections; femur with dark-brown tipped scales ventrally, mainly shining pale yellow dorsally; tibia dark yellowish gray, most scale bases pale yellowish gray, outer tibial spurs dark gray, extreme apex yellowish white, inner tibial spurs longer and pale yellow dorsally; individual segments of tarsus mainly dark gray brown, scale bases pale and apex of each segment pale yellowish gray. Abdomen shining yellowish gray dorsally, mainly dark gray, segments becoming darker from base to apex; ventral surface pale yellow medially, segments with dark gray-brown scales laterally, posterior margin of each segment mainly pale yellow. Wing length: 5.7–7.0 mm. Forewing streaked with orange, orange brown, yellowish gray, and gray brown; fringe around apex orange to pale orange; ventral surface mainly dark gray brown, fringe somewhat paler and streaked with orange. Hindwing gray brown, veins darker and more intensely colored; cubitus with strong pecten from base to near origin of CuA2. Genitalia as illustrated in Figs. 2–4.

Types.—Holotype: ♂, Santa Rosa National Park, Guanacaste Province, Costa Rica; D. H. Janzen; 82.SRNP.311; Genitalia slide by RWH ♂ USNM 12099. In USNM. Paratypes: 26 ♂, 28 ♀, with same data as for holotype. All reared from new leaves of *Quercus oleoides*. In AMNH, BMNH, National Museum of Costa Rica (San Jose), USNM.

Discussion.—*Dichomeris santarosensis* is nearest *Dichomeris stratigera* Meyrick on characters of the male genitalia. *Dichomeris stratigera* is known from a



Figs. 2-4. *Dichomeris santarosensis*, genitalia. 2, 4, Male. 3, Female.

single specimen collected at Parintins, Brazil (about 300 km east of Manaus on the Amazon River). The major difference is in the juxta: the two lobes are divided to the base in *santarosensis*, whereas they are broadly fused in *stratigera*. Clarke (1969: 38, pl. 19-4a, b) illustrates the genitalia of *stratigera*.

#### ACKNOWLEDGMENTS

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#### LITERATURE CITED

- Clarke, J. F. G. 1969. Catalogue of the Type Specimens of Microlepidoptera in the British Museum (Natural History) described by Edward Meyrick. Vol. 7. Trustees of the British Museum (Natural History). London. 531 pp.